1 managed both tops and selected routers. The only 2 thing that my company at this time can interconnect with the top, it's just a trunk, and the top acts as a tandem per se. There's no physical conveyance 5 to the operator person. The tops would just see a 6 911 call coming in and reroutes it to the trunk that was established from the top switch to the two selected router or tandem in the area, and that's 9 how the call progresses.

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So, it behooves me why would Verizon could 11 not allow us to do this because, to me, this is ∥still a 911 network. The operator does not 13 facilitate any type of call. It's the machine, lit's a tandem, it's acting as a tandem. And if you talk with Nortel, the designing tech, plus the 16 network survival -- standard organization made this 17 recommendation, and this is what Nortel came about, \parallel that the tops office will act as a tandem. So, to me, it's just a switching platform, not an 19 **|**| operator-type service.

MR. KEHOE: I would like to ask the 22 | Verizon witness, is it technically feasible for WorldCom to go through the top switch for this purpose?

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MR. GREEN: Would they be able to place trunks in and connect with the tops? Yes. But I did contact my operator services folks this morning, and I posed this question to them, and I said, "You know, what--would it be detrimental to us to allow them to pass through the top switch," and they said yes, it would be.

And the reason they said it would be is that they said that by allowing them to have trunks going into our operator position, they can't prevent them from sending other types of traffic. And I'm not saying WorldCom would do this, but they can't prevent them from putting other types of traffic through that switch. And, in essence, what 17 a CLEC could do is they could use us as their overflow, and when their operator services were filled, the calls could come flowing through our operator services positions. And it would be very 21∥difficult to maintain the proper--the proper 22 capacity loads and the proper number of people to

have on duty at any one time, if we didn't expect that type of traffic to be flowing through.

> So, could we do it? Yes.

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Would it be advisable? No.

What they also told me is WorldCom could--and what many other CLECs do do--is they establish another trunk from their POT and the calls are passed through another route through their POT back over to the tandems. In essence, it acts the same way that our Verizon tops would act or operate.

MR. KEHOE: Would WorldCom have the capability of establishing that?

> MR. SIGUA: To his last suggestion?

MR. KEHOE: Yes.

The last suggestion would MR. SIGUA: actually -- what it would do is actually make me put out another trunk group like what I have my normal path, all right? They are both diverse. Let's say if I have two co-location in this area on those handoff point, one goes to one tandem A, and the 22 other one goes to tandem B.

Now, when I make my third handoff point, the question is, where do I hand out--where do I hand that call to? Do I have to go back again to co-lo A? If you tell me to go back to co-lo A, the redundancy is not built there. If I have a problem there with power outage, you knocked out two of my path because now the dual diversity issue had not been met. That's how come it's key in this forum that the diversity issue be met, if it's cost-effective and it doesn't really add any detriment to the network.

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As far as the issue he has raised us using this platform is ludicrous in the sense that the only traffic--I am speaking for this company--going to the third choice is 911, period. All right?

So, it is blocked. There is no way that no other translation people can point traffic to that, all right? I could even make an assurance that

WorldCom will take all the measures put in place that no translation person that's capable could make those entries, all right? Will sign off, that they will not touch that route other than 911.

With that constant, it will meet the 2 requirement that Verizon is saying, and I concur 3 that because, like I've said, traffic is a measurement of the functionality of any switch. 5 | So, if you put too much load in one design, you are 6 going to overload it, and so if we use that third choice for regular operator service, yeah, it defeats the purpose of the redundancy in the It undermines the 911 network, and it network. undermines operator service.

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Again for the WorldCom MR. KEHOE: witness, does the estimate of about 20 public service answering point coordinators in Virginia sound about right?

When I have opened my market MR. SIGUA: here--this is when I was in MFS and not MCI, okay--I dealt with, quote-unquote--I forgot the person's name who was the elected coordinator for northern Virginia at that time, who has given me information for Alexandria, per se, and Leesburg and Fairfax County and all the various agencies that I need to speak with, along with Verizon.

course, I spoke with them as incumbent. And
whatever piece that individual PSAP is there
because really we do not provide that granuality.
It's really the selective router that actually
routes those calls, but I need to make a physical
contact with the agency, whether that agency--

MR. DYGERT: Could I interrupt you for just a minute. I think it was a pretty simple question. Does 20 sound like--

MR. SIGUA: I have no idea.

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MR. DYGERT: That's enough, thank you.

MR. KEHOE: And I take it you would have to contact--rather, you think that maybe the coordinator wouldn't have the alternative routing numbers? You might have to contact the public service answering point itself.

MR. SIGUA: Why we make--

MR. KEHOE: If I could have a yes or no.

MR. SIGUA: To get the ten-digit number?

MR. KEHOE: Yes.

MR. SIGUA: That's what we do. We tried to get a one ten-digit number to address all the 20

1 PSAP in the area. That one PSAP can use a transfer 2 key so that when a call comes to the ten-digit 3 number, they could route it to the speed-dialing equipment in the PSAP through this various entity that could serve that phone call.

MR. KEHOE: And you could get that number from the PSAP coordinator?

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MR. SIGUA: Like what my colleague had 9∥said, northern Virginia had, because of the 10 platform that Verizon would put forth with the 11 third route to the tops, they feel they do not need 12 this type of redundancy. It's built into there, 13 that the service Verizon is giving, all right?

At this time, though, I would deliver, if 15∥you look at national safety, we have it in New York 16∥where the whole tandem did go down, and to back 17 that up because now we have latitude to back up a 18∥system, we did both Verizon and WorldCom contacted 19 New York City to build the ten-digit number. 20 York City themselves thought they did not like ten-digit number, but because of the situation at 22 | hand they did build in the ten-digit number.

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MR. KEHOE: But I'm confused and I would 1 2 just like to know yes or no.

Do public service answering point coordinators in Virginia provide ten-digit numbers, or do they not?

MR. SIGUA: On that? No, they don't, but they do when we press them because we press public 8∥safety issue. Like the first example I gave as far as operator service, when a person cannot reach 911, they dial it and they get busy. The next thing that comes to there is dialing operator. So, we have to give our operator who was not local for the other side of the country, Matoon, Illinois, they query the customer's information, and they will dial the ten-digit number to northern 16 | Virginia. And that's the leverage we use time and time again whatever interface with northern Virginia that has that authority to give me, that's the leverage I use to obtain that number.

MR. KEHOE: Thank you very much. I have no further questions.

> MR. DYGERT: Any questions on redirect?

1 MR. OATES: No questions from Verizon. Ι 2 would simply like to move into evidence Verizon--what has been marked as Verizon Exhibit 60. And again, I can authenticate it through the witness, or if WorldCom has no objection I will just offer it. 7 MR. MONROE: I don't think I have an objection. I want to clarify that Exhibit 60 represents Verizon's latest proposal and is not 9 necessarily agreed to by WorldCom. 11 MR. OATES: That is correct. This is

Verizon's latest proposal, the product of mediation and discussion between Mr. Sigua and Mr. Green offered to WorldCom yesterday.

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MR. DYGERT: Thank you. That's admitted. (Verizon Exhibit No. 60 was admitted into evidence.)

MR. MONROE: I have no redirect.

MR. DYGERT: Good. Thank you very much, 20 gentlemen. You are excused.

MR. MONROE: Mr. Dygert, this has been marked as WorldCom Exhibit 45. This is intended to

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1 replace the original WorldCom Exhibit 45 which, as 2 you will recall, did not have a diagram referenced in the first page. The first page is the same as the original. The only difference is there is now a diagram attached, so we would move to have this to replace the original WorldCom 45.

MR. DYGERT: Thank you. It's in the record now.

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QUESTIONS FROM STAFF

MR. GOYAL: Back to subpanel five. Since we spent most of the time on the one issue, we 12 should stick to it.

Mr. Albert, would it be safe to say the lower case end MUXing is the MUXing necessary for Verizon to terminate trunk routes into its own That's the specific purpose for which switches? the lower case end MUXing is used?

> MR. ALBERT: Yes.

MR. GOYAL: Regardless of the locations at which it performs the lower case end MUXing, I believe you agreed in your testimony or--let me 22 take that back.

Regardless of the locations where lower case end MUXing is performed, would Verizon agree to any technically feasible interface or interconnection at the POI regardless of what trunks are needed or deMUXing is needed at hub locations to connect it to Verizon switches?

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MR. ALBERT: Combined all the stuff together you need to separate for purposes of the contract, there are particular specific methods of interconnection, interconnection being the physical connection of the CLEC's facilities and our facilities, which we have spelled out and agreed to in the contracts, mid-span meet is an entrance facility is an example. So, the overall interconnection of the higher capacity pipes, those particular methods are spelled out.

When you say any technically feasible, there are probably other ways imaginable, technically possible ways to do it, but in order to 20 put something in the contract I need to be able to do it, to implement it, I will be held to it. are willing to put a process in the contract to

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develop stuff that CLECs asked for that doesn't exist today.

> That would be the BFR process? MR. GOYAL:

MR. ALBERT: Correct, which we would use to develop now stuff that doesn't exist.

MR. GOYAL: One thing I wanted to understand with respect to transport on Verizon's side of the point of interconnection, is the issue of compensation of Verizon for that transport because am I correct in understanding that Verizon would require that transport if the CLEC is not connecting a DS3 trunk, for example, at a hub location, Verizon would require additional transport from a separate point of interconnection to a hub location in order to deMUX it to terminate it in switches? Am I correct in that understanding? The first question was a question about physical transmission, not about 19 compensation.

MR. ALBERT: DS1s can be ordered to any place, okay? DS3s can be ordered to any place. But multiplexing, the busting down of the DS3s to

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the DS1s, have to be ordered to the two types of 2 hubs, terminus and the intermediate.

MR. GOYAL: And I believe we already covered that multiplex deMUXing is necessary to connect the traffic into the Verizon switches; correct?

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All switches MR. ALBERT: Yes. connections are DS1s, so the CLEC could do the multiplexing or we could do the multiplexing, but it's got to be broken down to a DS1 to make the final connection of the trunk to the switch.

MR. GOYAL: Going back to the diagram that we had up in Verizon Exhibit 59, for the scenario where a CLEC interconnects using a DS3 interconnection facility to a co-location in central office A, why does Verizon believe that the CLEC should pay for dedicated transport from the point of interconnection at central office A into 19 the deMUXing equipment at the intermediate hub? 20 Why is it Verizon's position that the CLEC should |pay for that transport as opposed to it being a 22 cost born by Verizon?

In your answer I would like you to 2 separate your explanation from the issues raised 3 under the VGRIPs proposal, so, for example, assume for purposes of this answer that Verizon gets the 5 VGRIPs proposal and is awarded and does recover 6 transport to a distant point of interconnection for lits originating traffic, assuming that hypothetically that is the case, why does Verizon 9 feel it needs to recover from the CLEC for 10 dedicated transport between central office A and 11 the intermediate hub?

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MR. D'AMICO: Well, this is associated 13 with AT&T sending traffic to Verizon, so in that 14 example, I'm not sure where the tandem is or what 15 end office we are talking about, but let's just 16 assume that the intermediate hub is the tandem, and 17 H AT&T wants to put in tandem trunks. So, to get 18 from the co-lo A from their cage to the 19 | intermediate hub, that would be transport in order to get them to Verizon's IP, which is a tandem.

21 The other alternative would be for them to 22 go directly from their switch and just order a DS3

1 right into the intermediate hub, which again in 2 this example is a tandem.

For traffic that AT&T delivers MR. GOYAL: to a POI at central office A for termination at any one of the end offices indicated in the diagram, would AT&T be paying Verizon reciprocal compensation for the termination of that traffic? MR. D'AMICO: No. If CO A is central office, they could only terminate traffic to that central office.

So, in that example --

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MR. GOYAL: I'm sorry, for this 13 ∥hypothetical, this is assuming the POI was at the central office. There is DS3 interconnection trunk coming into central office A, and then from there 15 II 16∥Verizon routes it however it needs to route it to the other switched locations in that diagram. I believe, Mr. Albert, you testified that would be 18 | possible if there was -- if the CLEC purchased 20 | interconnection transport at the DS3 level between central office A and the intermediate hub; correct?

Yeah, but the way we would be

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MR. ALBERT:

1 building it is the way the CLEC specified it ordered to be done.

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MR. GOYAL: My question is: In that hypothetical, would AT&T be paying Verizon reciprocal compensation for traffic it handed off to Verizon at that central office A location?

MR. D'AMICO: If the intermediate hub is a 8 tandem they would pay for transport to get it from 9∥the Verizon IP which is a tandem on a facility 10 basis. And once it hits the tandem, Verizon would 11 deliver it to whatever subtending end office the number is home to, and that's where the tandem 13 recip comp rate would recover that.

MR. GOYAL: Can you break out for me what 15 rate elements Verizon would recover under reciprocal compensation for that specific hypothetical?

MR. D'AMICO: Sure. For any traffic that 19 would be delivered to the tandem, what's included 20 | in the tandem recip comp rate would be the recurring tandem port charges, the tandem switching, the inner office, I quess, common

1∥mileage--I'm not sure what it's called--from the 2 tandem to the various end offices, and then the 3 end-office switching at the terminating end office. That's kind of bundled up to be the tandem recip comp rate.

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MR. GOYAL: But that recip comp rate would not include any costs for the transport between central office A and the intermediate hub location?

MR. D'AMICO: No, it would not.

MR. GOYAL: Does AT&T believe that reciprocal compensation rate should include costs 12 reflecting the transport provided between central office A of the intermediate hub location?

MR. TALBOTT: No. AT&T believes it should 15∥be permitted to interconnect in a manner that it 16 | finds efficient for its own traffic and shouldn't be required to interconnect inefficiently.

If the Commission were to order that we--

MR. GOYAL: This is a question specifically with respect to AT&T originated 21 traffic handed off at the POI for termination, central office as for termination. I wanted make sure I was clear about that.

MR. TALBOTT: Yes, sir. If the traffic were destined to a switch at central office A and we were not permitted to have multiplexing at central office A, which would be the efficient way to deliver traffic, and the Commission were to agree with Verizon that it's not required to allow us to--the Commission does not require Verizon to provide us multiplexing at that location, even though it has it available for its own use, then the Commission should order Verizon to provide any additional transport at no cost to the CLEC.

But I think the simpler solution is just to allow the CLEC to determine for itself what's the most efficient way to deliver its traffic.

MR. GOYAL: Okay. Moving to the issue of multiplexing at locations other than hub locations, intermediate or terminus hub locations, would AT&T agree that in providing such--and providing cross-connects to interconnection facilities at nonhub locations and cross-connects to interconnects to

1 whatever interface they're used, Verizon would 2 | incur costs in terms of personnel, procedures, 3 physical cross-connects, the installation of MUXing equipment?

Nothing more than it has MR. TALBOTT: already established so for its rates. Reciprocal compensation rates are based on TELRIC principles. 8 They're forward-looking costs. The costs for their 9 network for the asynchronous M13 multiplexors 10 described earlier are already in their network. They have forward-looking costs, maybe more efficient to use a three-to-one DCS digital cross-connect system, is probably less costly on a 14 cost basis.

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It's up to Verizon whether in its network 16∥design whether it wants to move to a more modern 17 cost-efficient piece of equipment or leave the older equipment in its network. But in neither 19 case should the CLEC have to bear the costs for Verizon to upgrade its network because Verizon is choosing for itself not whether to upgrade or not.

MR. GOYAL: Does that answer apply, in

1 AT&T's opinion, with respect to both recurring charges such as reciprocal compensation as well as 3 nonrecurring charges for the implementation of 4 trunk interconnection?

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MR. TALBOTT: Yes. However Verizon would choose to derive the functionality needed to provide the termination of our traffic, it could do so.

But the rate shouldn't change based on the 10 | technology they used to provide that functionality.

MR. GOYAL: Mr. Talbott, are you familiar 12∥with the FCC's First Local Competition Report and 13 Order?

MR. TALBOTT: Some parts more than so than 15 others.

MR. GOYAL: Are you familiar with that 17 | language in the report and order that discusses the 18 cost recovery for a CLEC's choice of expensive 19∥interconnection? Are you familiar with that?

MR. TALBOTT: Yes, I am.

MR. GOYAL: Could you explain how that 22 | language applies, if at all, to the implementation

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1 of multiplexing--to the implementation of ||interconnection at nonhub locations if Verizon has to install additional multiplexing equipment to expand its interoffice facility, et cetera.

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MR. TALBOTT: I disagree with the assertion of the Verizon witnesses that they need to install additional multiplexing equipment. they admitted earlier, they do this multiplexing for their own purposes regularly. There is no other way for them to connect their, quote, interoffice network to their switches, except by dual using asynchronous M13 multiplexors. 13 those multiplexors are available for their use, they simply need to, quote, assign them for CLEC And their sole distinction is because they usaqe. have a label on that equipment. And putting a 17∥label on equipment free for Verizon's use, and only for Verizon's use, shouldn't alter the costs for a 19∥technician to wire up that multiplexor for AT&T's 20 or CLEC's use. The costs would be the same. Ιf 21 | Verizon wants to change the technology, it should 22 be free to do so, but that's not expensive either.

1 In Verizon's testimony they asserted that 2 in order for them to do the multiplexing at a nonhub location they would have to install, quote, very expensive piece of digital cross-connect equipment, and I don't believe that's the case. 5 They are free to do so, but they may derive that same functionality with another piece of equipment 8 they use for their own services.

So, they're doing it today for themselves and they should be required because it's technically feasible to do it for CLECs.

12 MR. GOYAL: That's all I have on this 13 issue.

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MR. STANLEY: I have a question for 15 | Verizon.

Could you explain to me--I'm not sure you did a short time ago -- why Verizon is unable to provide multiplexing to requesting CLECs at nonhub ||locations? Is it a technical feasibility issue, or because the ordering conventions haven't been developed yet through OBF?

> MR. ALBERT: It's a matter of the

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1 necessary equipment to specifically provide DS3 to 2 DS1 multiplexing. Almost all occasions is not to 3 be seen resident and spare in those offices.

This asynchronous multiplexor we are talking about on Exhibit 59 that does the DS3 to 6 the DS1 multiplexing, that is a box, a piece of electronics that has a single DS3 coming into it, and it's got 28 DS1s coming out of it.

In order for a CLEC to order DS3 to DS1 10 multiplexing, that very specific type, that entire 11 box has to be dedicated to them because it's their 12 DS3 coming into it, and it's their 28 DS1s coming 13∥out of it.

Offices of ours where we have got these in place will have, for Verizon, will have our DS3s going off to a distant Verizon location and will tend not to have all of the DS1 inputs filled up. So, as we continue to provision circuits on this older stuff, we don't have spare whole ones sitting there that would be needed to provide DS3 to DS1 multiplexing.

MR. STANLEY: So, I guess my question is:

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